

RECEIVED
CENTRAL FAX CENTER

SEP 26 2007

AMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions, or listings, of claims in this application.

1. (Currently Amended) A continuous process for the production of an elastomer-modified thermoplastic comprising
 - (i) obtaining graft elastomer D) that includes a grafted phase A), said D) having residual moisture content of 1 to 50 wt. %,
 - (ii) partially filling a compounding reactor with the graft elastomer D) and a thermoplastic resin B) through at least one inlet of the compounding reactor and operating the partially filled compounding reactor under conditions calculated to melt D) and B) and to remove organic volatile components C), and
 - (iii) collecting a molten blend comprising A), D) and B),
said reactor being equipped with a housing having a surface, a plurality of kneading bars that provide kneading action and an exit zone, said kneading bars conveying a portion of the molten blend towards the reactor inlet; and
~~wherein heat energy required to melt D) and B) is introduced by mechanical energy via said kneading action and thermal energy by heating a surface of the housing, at a ratio of mechanical energy to thermal energy of 4:1 to 1:6~~
wherein the throughput of the molten blend comprising A), D) and B) through the compounding reactor per liter of processing capacity is no more than 5 kg/h.
2. (Original) The process of Claim 1 wherein the graft elastomer D) is dewatered in at least one of centrifuge and a dewatering extruder.
3. (Original) The process of Claim 2 wherein the graft elastomer D) is dewatered in a centrifuge and a dewatering extruder connected in series to yield residual moisture content of 10 to 23% relative to the weight of D).
4. (Cancelled)

PO-8033

-2-

5. (Original) The process of Claim 1 wherein elastomer D) is selected from the group consisting of butadiene rubber, acrylonitrile-butadiene rubber, styreneacrylonitrile-butadiene rubber.
6. (Original) The process of Claim 1 wherein said grafted phase A) is at least one member selected from the group consisting of styrene-acrylonitrile copolymer, polystyrene, polymethyl methacrylate, polyvinyl chloride, polycarbonate, polybutylene terephthalate, polyoxymethylene, polymethyl methacrylate, polyphenylene sulfide, polysulfone, polyether sulfone and polyamide.
7. (Original) The process according to Claim 1 wherein the thermoplastic B) is at least one member selected from the group consisting of styrene-acrylonitrile copolymer, polystyrene, polymethyl methacrylate, polyvinyl chloride, polycarbonate, polybutylene terephthalate, polyoxymethylene, polymethyl methacrylate, polyphenylene sulfide, polysulfone, polyether sulfone and polyamide.
8. (Original) The process of Claim 1 wherein the conveying by the kneading bars takes place in the exit zone.
9. (Cancelled)
10. (Cancelled)
11. (Cancelled)
12. (Cancelled)
13. (New) The method of Claim 1, wherein heat energy required to melt D) and B) is introduced by mechanical energy via said kneading action and thermal energy by heating a surface of the housing, at a ratio of mechanical energy to thermal energy of 4:1 to 1:6.